

Table S6: Microbiota altered genes in non-gut tissues.

CG NUMBER	GENE SYMBOL	GENE category	GENE FUNCTION	young carcass		
				Canton S CR/AX	DIRG	GIRG
CG6639	CG6639	METABOLISM/DIGESTION	serine-type endopeptidase activity	12.99	+	-
CG42807	CG42807	UNKNOWN	-	4.25	-	+
CG32368	CG32368	UNKNOWN	-	3.42	-	+
CG14027	TotM	IMMUNE RESPONSE	Turandots	3.07	+	+
CG6640	CG6640	UNKNOWN	-	2.62	-	+
CG31901	Mur29B	GUT STRUCTURE	chitin binding	2.54	-	-
CG31509	TotA	IMMUNE RESPONSE	Turandots	2.17	-	+
CG14745	PGRP-SC2	IMMUNE RESPONSE	amidase activity	2.16	+	-
CG31508	TotC	IMMUNE RESPONSE	Turandots	2.09	-	+
CG5773	CG5773	UNKNOWN	-	2.04	-	-
CG14499	CG14499	UNKNOWN	-	2.04	+	-
CG9989	CG9989	UNKNOWN	-	1.89	+	-
CG7106	lectin-28C	IMMUNE RESPONSE	lectin	1.78	+	-
CG11501	CG11501	UNKNOWN	-	1.63	-	-
CG9120	LysX	IMMUNE RESPONSE	lysozyme activity	1.61	-	+
CG4784	Cpr72Ec	GUT STRUCTURE	structural constituent of peritrophic membrane	1.60	-	+
CG4559	ldgf3	IMMUNE RESPONSE	imaginal disc growth factor receptor binding	1.57	+	+
CG13905	CG13905	UNKNOWN	-	1.57	+	+
CG11671	CG11671	UNKNOWN	-	1.55	-	+
CG4269	CG4269	UNKNOWN	-	1.51	+	+
CG10812	dro5	IMMUNE RESPONSE	antimicrobial peptides	1.50	+	-
CG15784	CG15784	UNKNOWN	-	1.47	+	+
CG15068	CG15068	UNKNOWN	-	1.45	-	-
CG11878	CG11878	UNKNOWN	-	1.45	-	+
CG10725	CG10725	GUT STRUCTURE	structural constituent of peritrophic membrane	1.43	-	+
CG7763	CG7763	IMMUNE RESPONSE	carbohydrate binding	1.43	-	+
CG8353	CG8353	UNKNOWN	-	1.43	-	-
CG14934	mal_B1	METABOLISM/DIGESTION	maltase	1.42	-	+
CG7629	AttD	IMMUNE RESPONSE	antimicrobial peptides	1.40	+	+
CG17567	CG17567	UNKNOWN	-	1.38	-	+
CG31704	CG31704	METABOLISM/DIGESTION	serine-type endopeptidase inhibitor activity	1.38	-	+
CG18188	Damm	METABOLISM/DIGESTION	cysteine-type endopeptidase activity	1.38	-	-
CG4472	ldgf1	IMMUNE RESPONSE	imaginal disc growth factor receptor binding	1.37	+	+
CG16836	CG16836	UNKNOWN	-	1.37	+	+
CG4716	CG4716	UNKNOWN	-	1.37	+	+
CG10146	AttA	IMMUNE RESPONSE	antimicrobial peptides	1.37	+	-
CG8023	elF4E-3	GENE EXPRESSION	eukaryotic initiation factor 4G binding	1.36	-	-
CG15065	CG15065	UNKNOWN	-	1.36	+	-
CG4363	CG4363	UNKNOWN	-	1.35	-	-
CG1152	Gld	METABOLISM/DIGESTION	glucose dehydrogenase activity	1.34	-	+
CG14872	CG14872	UNKNOWN	binding	1.34	-	+
CG15154	Socs36E	SIGNALING	regulation of JAK-STAT cascade	1.34	-	+
CG14872	CG14872	UNKNOWN	binding	1.33	-	+
CG8317	CG8317	UNKNOWN	-	1.32	-	+
CG31004	CG31004	GUT STRUCTURE	cell-matrix adhesion	1.32	-	+
CG31810	CG31810	METABOLISM/DIGESTION	steroid dehydrogenase activity	1.31	-	-
CG4716	CG4716	UNKNOWN	-	1.31	-	+
CG4181	GstD2	STRESS RESPONSE	glutathione transferase activity	1.31	-	+
CG13482	CG13482	UNKNOWN	-	1.31	+	-
CG10112	Cpr51A	GUT STRUCTURE	structural constituent of chitin-based cuticle	1.31	+	+
CG7052	TepII	IMMUNE RESPONSE	TEPs	1.30	+	+
CG9976	Lectin-ga1C1	IMMUNE RESPONSE	galactose binding	1.30	-	-
CG18372	AttB	IMMUNE RESPONSE	antimicrobial peptides	1.30	-	-
CG13659	CG13659	METABOLISM/DIGESTION	transferase activity, transferring phosphorus-containing groups	-1.30	-	+
CG8523	Mdr50	STRESS RESPONSE	ATPase activity, coupled	-1.30	-	-
CG12026	CG12026	GUT STRUCTURE	sound perception	-1.32	-	-
CG15418	CG15418	METABOLISM/DIGESTION	endopeptidase inhibitor activity	-1.33	-	-
CG33510	CG33510	UNKNOWN	-	-1.33	-	+
CG6580	Jon65Aii	METABOLISM/DIGESTION	serine-type endopeptidase activity	-1.35	-	-
CG6921	bond	GUT STRUCTURE	cytokinesis after meiosis I	-1.35	-	+
CG5178	Act88F	GUT STRUCTURE	actin binding	-1.39	+	-
CG17475	CG17475	METABOLISM/DIGESTION	Peptidase S1/S6	-1.40	-	-
CG33192	MtnD	METABOLISM/DIGESTION	metal ion binding	-1.40	-	+
CG31900	CG31900	UNKNOWN	-	-1.42	-	-
CG6188	CG6188	UNKNOWN	-	-1.77	-	-
CG8147	CG8147	METABOLISM/DIGESTION	alkaline phosphatase activity	-1.80	-	-
CG11425	CG11425	METABOLISM/DIGESTION	phosphatidate phosphatase activity	-2.19	-	+

